

Ultrasonic sensors are used around the world, indoors and outdoors in the harshest conditions, for a variety of applications. Our [ultrasonic sensors](#), made with piezoelectric crystals, use high frequency sound waves to resonate a desired frequency and convert electric energy into acoustic energy, and vice versa. Sound waves are transmitted to and reflected from the target back to the transducer. Targets can have any reflective form, even round. Certain variables, such as target surface angle, changes in temperature and humidity, and reflective surface roughness, can affect the operation of the sensors.

## **Ultrasonic Sensing Applications:**

Migatron has been using advanced technology to solve difficult sensing and control problems for nearly 40 years across a broad range of industries. With Ultrasonic Sensing's unique advantages over conventional sensors and the rapidly increasing range of applications, ultrasonic sensors are becoming widely accepted as an industry standard across the board.

## **Typical Applications:**

### **Tank Level:**

—Liquid level sensors are integral to process control and inventory management in many industries.

At Migatron, we engineer two types of level sensors, point level sensors (proximity sensors) and continuous level sensors (analog sensors). The type of sensor appropriate for your liquid level measurement depends on the application.



### **Production Line Sensors:**

\_\_ Ultrasonic sensors can be applied to the manufacturing process for automated process control on the factory floor while also being an indispensable tool for companies to maximize efficiency through precise measurement and control.



### **Distance Measurement:**

\_\_Ultrasonic sensors can measure the distance to a wide range of objects regardless of shape, color or surface texture. They are also able to measure an approaching or receding object.

